

WHAT IS CLAIMED IS:

1. A filter assembly for an exhaust gas purification system of an internal combustion engine of a motor vehicle comprising:

(a) a plurality of filter plate elements coupled to each other on their outer and inner periphery forming in pairs, a plurality of filter pockets, having outer and inner sides and outer and inner apexes; and,

(b) a plurality of catalytic agents with at least one catalytic agent associated with at least one of said plurality of filter pockets on said outer and inner sides.

2. The filter assembly according to claim 1, wherein said plurality of catalytic agents are catalytically active foils.

3. The filter assembly according to claim 2, wherein each of said plurality of catalytically active foils are coupled to at least one of said plurality of filter plate elements on said plurality of outer and inner apexes.

4. The filter assembly according to claim 3, wherein said plurality of catalytically active foils have a stiffening structure.

5. The filter assembly according to claim 3, wherein said plurality of catalytically active foils are fixed in a radial alignment by a supporting means of said plurality of filter pockets.

6. The filter assembly according to claim 3, wherein at least a portion of said plurality of catalytically active foils have an oxidation-catalytically active coating.

7. The filter assembly according to claim 3, wherein at least a portion of said plurality of catalytically active foils are actively coated with a catalytic material supporting the reduction of nitrogen oxide.

8. The filter assembly according to claim 7, wherein said plurality of foils have a metering means for feeding ammonia acting as a reducing agent.

9. The filter assembly according to claim 8, wherein said metering means comprise star shaped channel nozzles disposed in the filter assembly.

10. The filter assembly according to claim 9, wherein said channel nozzles of said metering means are formed as one piece elements through embossed structures of said plurality of filter plate elements.